leakage or spillage of acid must be immediately washed down. This requirement can be met by facilities provided from shore.

(c) Nitric acid contaminated by other chemicals, oils, solvents, etc. may not be transported in bulk without an authorization from the Commandant (CG-522).

[CGD 80-001, 46 FR 63280, Dec. 31, 1981, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983; CGD 88-100, 54 FR 40041, Sept. 29, 1989]

§ 151.50-81 Special operating requirements for heat sensitive cargoes.

When table 151.05 refers to this section, the following apply to the cargo:

- (a) Must not be carried in a tank equipped with heating coils unless the heating supply to the coils is disconnected.
- (b) Must not be carried in a tank adjacent to another tank containing an elevated temperature cargo.
- (c) Must not be carried in a deck tank.

[CGD 80-001, 46 FR 63280, Dec. 31, 1981, as amended by CGD 88-100, 54 FR 40041, Sept. 29, 1989]

§151.50-84 Sulfur dioxide.

- (a) Sulfur dioxide that is transported under the provisions of this part may not contain more than 100 ppm of water.
- (b) Cargo piping must be at least Schedule 40 pipe.
- (c) Flanges must be 150 lb. A.N.S.I. Standard minimum with tongue and groove or raised face.
 - (d) A cargo tank must:
- (1) Meet the requirements of a Class I welded pressure vessel;
- (2) Be designed for a maximum allowable working pressure of at least 125 psig:
- (3) Be hydrostatically tested every two years to at least 188 psig;
- (4) Be provided with one or more manholes that are fitted with a cover sized not less than 15 inches by 23 inches or 13 inches nominal diameter, located above the maximum liquid level, and as close as possible to the top of the tank;
- (5) Have no openings other than those required in paragraph (d)(4) of this section:

- (6) Have no liquid level gauges other than closed or indirect gauges;
- (7) Have all valves and the closed gauge that is required by Table 151.05 bolted to the cover or covers that are required in paragraph (d)(4) of this section:
- (8) Have a metal housing that is fitted with a drain and vent connection protecting all valves and the closed gauge within this housing against mechanical damage;
- (9) Have all safety relief valves discharging into the protective housing;
- (10) Not be interconnected with another cargo tank by piping or manifold that carriers cargo liquid, except vapor lines connected to a common header, and
- (11) Have an excess flow valve that is located on the inside of the tank for every liquid and vapor connection, except the safety relief valve;
- (12) Have no bypass opening on any excess flow valve.
 - (e) Cargo transfer operations:
- (1) May not be conducted with more than one cargo tank at a time unles each tank is filled from or discharged to shore tanks through separate lines;
- (2) Must be conducted with connections between fixed barge piping and shore piping of either Schedule 40 pipe having flexible metallic joints that meet §151.04–5(h) or of flexible metallic hose that is acceptable to the Commandant (CG-522);
- (3) From barge to shore must be by pressurization with an oil free, non-reactive gas that has a maximum of 100 ppm moisture;
- (4) Must be conducted with vapor return to shore connections that ensure that all vapor is returned to shore; and
- (5) Must be conducted with every person on the barge carrying a respiratory protective device that protects the wearer against sulfur dioxide vapors and provides respiratory protection for emergency escape from a contaminated area that results from cargo leakage.
- (f) Respiratory protective equipment must be of a size and weight that allows unrestricted movement and wearing of a lifesaving device.
- (g) After the completion of cargo transfer, all liquid sulfur dioxide in the cargo piping must be removed and